

SANITARIUM (The) BATTLE CREEK
MICH.
✓



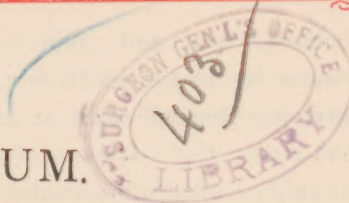
THE SANITARIUM.

BATTLE CREEK
MICHIGAN

403
BATTLES CREEK OFFICE
LIBRARY

THE SANITARIUM.

REPRINTED from the *Detroit Tribune*,
for June 17, 1888.



THE • SANITARIUM.

MICHIGAN'S AID TO THE GOOD HEALTH OF
THE WORLD.

A POPULAR JOURNALIST AND LECTURER SAMPLES THE BALM THERE IS IN BATTLE
CREEK — REVIEW OF WAYS AND WORKS IN THE INSTITUTION — PROSPERITY
OF PHILANTHROPY — FREE HOSPITAL AND ORPHANS' HOME.

BATTLE CREEK, *June 15.*

I stand upon the promenade roof of a tall building that has captured the tip-top of its neighborhood, and take in the outlines of the scene: A city of 15,000 highly respectable people through the valley at the east and south, and elbowing hard for new room up the easy hills that give the old town a generous hug on every side; two to six miles away, and every way, with slopes and vales of their own, well-

behaved fruit and grain farms that never go "over the hill to the poor-house"; nearer by, at the south, fair Goguac Lake; in the valley, two streams of grist-mill size that jog through town at a tumbling gait and jump into each other's arms just at the west; three streams of travel by rail, crossing each other and running both ways at once; a half-dozen school-houses jostling the houses and suggesting inhabitants of civilized habits, with purpose to build the children that way, too; spires enough to imply good moral character here and say amen to every upward purpose; and a family of college buildings across the street, while, serene among the nervous and fussy dwellings of the period, some quaint old houses quietly live on into their second half century, leaning upon their massive front pillars like the wrinkled pilgrims of the Revolution on their hickory walking sticks.

— : : — The Legend of a Name, — : : —

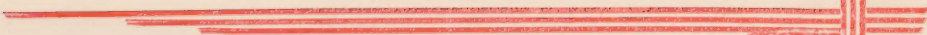
and what of it? Well, in the legendary Indian age, at the meet of the waters mentioned, Wautoga, chief of the Ottawas, whose daughter had eloped with the son of Great Elk, chief of the Pottawotamies, told Miss Duskskin to come back into the paternal camp; whereupon she laid her hand within the bridegroom's and smiled.

The wicked Wautoga retorted with his hatchet through her brain. Son-in-law quickly gathered the chieftain's scalp, and a general fight followed. And thereupon the water that flows in with Looking-glass water, or Kalamazoo River, was no longer called Waupakisco, but, in plain Yankee tongue, Battle Creek.

And this is where we are—a city of beauty and of business, culture and conscience, having voted the saloon a long vacation, and riding four miles of street railway. Settlement began 57 years ago, and still there is a corner lot to be had. Battle Creek is in Calhoun county, central-southern Michigan, a county gifted with a good, natural, open-hearted soil, with 30 respectable lakes and a dozen streams. It is 122 miles west from Detroit, 160 east from Chicago, on the Michigan Central, the Grand Trunk, and the Cincinnati, Jackson & Mackinaw railways, with but very small use for a cemetery, its death-rate being the remarkable one of barely seven for each 1000 inhabitants annually. Battle Creek is essentially a New England colony. Its early settlers came from Massachusetts, Vermont and Maine, with many from New York. This accounts for the air of Eastern culture and refinement, combined with Western energy and thrift, which even a stranger observes as a characteristic of the place, and which renders this beautiful little city one of the most orderly communities in Michigan, or any other State, and a most desirable locality for a home.

: : — Some Natural Advantages. — : :

That is the way the city looks to a man on top of the five-story Medical and Surgical Sanitarium. And what is that? Well, it's the means by which a number of generous men and women with money distribute over all this country and some of Europe the natural health advantages of this location and the healing advantages of the best medical institution money and love of humanity can command. In the beginning of things they made a full diagnosis of the whole central belt of the temperate zone, found this central, locally correct, and so sheltered by the great woods of Michigan and so tempered by the great waters round about the State as to secure the most even temperature allowed within the mid-western States. The rolling surface, the forests and the lakes graduate the summer of Michigan into its winter and its winter into its summer, keeping out the severely sudden shifts of heat and cold—the hot blasts and the blizzards of the prairie states—and creating it the fruit state of the North. In Michigan, sober folk neither freeze to death nor die of sunstroke—beyond the exceptions that mark the rule a truth. Why, Battle Creek is 500 feet above the sea—300 higher than Chicago—and the basement of the Sanitarium is 66 feet above the rivers that drain the region.




: : Summer Breezes. : :

The highest climb mercury made here last dog days was 96° F., and seldom touched 90, while Chicago commenced on the second hundred, and the temperature reached 104° F. on the hottest days. At Mackinac and Marquette the thermometer stood above a hundred in the shade. The thermometer in this breezy place rarely reaches 90°.

As in other parts of Central Michigan, the winters are likewise milder than in adjacent states, being tempered by the surrounding waters of the great lakes. The winter blizzards sometimes advertised by the weather clerk to reach this protected region from the Northwest always break their backbones on Lake Michigan, and do not arrive at all, or in so dilapidated a condition as to be unrecognizable.

Battle Creek is not Florida, Colorado or California, but their mean, which seems to have in it the gold of good health for the poor health that can find it anywhere; and "the artificial climate" conjured at will within the generous walls calls to mind either the states by the sea or under Pike's Peak.



—: :— A Chemist's Opinion of the Water Supply. —: :—

The City of Battle Creek has an excellent water supply, but the Sanitarium has its own private supply of water, which Prof. A. B. Prescott, chemist at the State University, after having twice analyzed it, says: "This water must be classed with those of extraordinary purity," and he's a man acquainted with water in its natural state. The water is soft, and has its head in the sandstone rock at the bottom of the giant wells 2000 feet away.

—: :— An Interview with the Medical Superintendent. —: :—

Well, having looked over the situation and the philanthropy thus far, and noted the general satisfaction among the patients, I said: "Altogether, natural and artificial, it's a pretty good thing, I guess." So, being in town for a pair of popular lectures, with "a day off," I climbed the hill with a street car on purpose to look some more into the winding up of run-down humanity, and to get at the bottom I began at the top, by interviewing the Medical Superintendent, J. H. Kellogg, M. D.

To say that the doctor is an easy man to interview would be a distortion of facts. He spends eight to twelve hours daily in the examination and treatment of pa-

tients, operations, etc., but seems to have a sort of aversion to newspaper men. I lay in ambush half a day before I was able to catch him long enough to put a few questions at him, and then he seemed so impatient to get away that he couldn't keep still, but circled around the room with an occasional half-moment forgotten in an easy chair, as he answered my questions.

"The origin of the Sanitarium, Dr. Kellogg, what was it?" I asked.

"The original," said he, "was a small affair opened in 1866 on the water-cure plan, the thought of the founders being to treat the sick chiefly with water and a regulated diet."

"Was their purpose money or public benefit?"

"It certainly was not money; for while it was regularly incorporated and the money furnished by several hundred stockholders in shares of \$25 each, each certificate of stock contains the proviso that the holder never should receive any dividends, but that all profits should go for improvement in facilities and for the care of the sick poor. This provision continues until this day. The real purpose or hope of the enterprise was to promote sanitary reforms in all directions. It was, you know, about the time that this Institution was launched that the advocates of oatmeal, graham flour, cracked wheat, and other cereal preparations first came to the front; and

that agitation had something to do with the origin of this Institution, as at that time there was much popular opposition to these excellent and now universally used foods."

"And how long did water cure?"

"Well," said the doctor, "after about ten years in which the Institution enjoyed some repute as a water-cure, its prosperity began to wane, and the managers became convinced that a change was necessary. At their request, I came to the Institution as superintendent and physician-in-chief, much against my personal feelings, as I was interested in other lines of medical and scientific work. I consented to come only under the conditions that I should be allowed to enlarge the scope of the Institution and place it upon a broader and rational basis."

: : — A Healthy Growth. — : :

"Will you give me some idea of the growth of the Institution?"

"Twelve years ago the Institution consisted of the small wooden main building and four or five cottages tenanted by some thirty-five people in quest of new stomachs, livers, brains, etc., and about twenty-five doctors and employes. By the following spring our little buildings had overflowed, and we were renting neighborhood rooms, and it

became evident that larger accommodations must be afforded. We had no money, but our credit was good, and in the course of the next year we erected the larger portion of our present main building at a cost of a little more than one hundred thousand dollars, all of which was borrowed. Our increase in patients was so rapid that when the building was completed in the early spring of 1878 every floor was occupied, and at no time since have we had any surplus room.

“Four years ago, we found that our rent bill for outside rooms was about fifteen hundred dollars annually, and we added the new five-story brick addition to the main building at a cost of \$60,000 and yet are now again paying \$1200 a year for outside rooms, and for several summers we have had to pitch tents for the lodgment of a portion of our help.”

—:—:— Present Size of the Institution. —:—:—

“What is the present capacity of the Sanitarium?”

“With the added room of the 15 cottages we at present occupy,” he replied, “we can accommodate about four hundred people.”

“How many helpers do 300 patients keep busy?”

“About two hundred. We have 197 to-day, including physicians, nurses, and bath attendants, numbering more than one hundred in the medical corps.”

“For what purpose is the large building in course of erection just north of the present main building?” I asked.

“A free hospital,” said he, “which will contain 175 beds.”

“Well, well,” I thought, “so the poor are to have the gospel practiced unto them!”

“Our charity work,” the Doctor continued, “of late has amounted to \$10,000 to \$12,000 a year, but we have not had room to be as charitable as we mean to be with increased facilities. At present we are treating twenty-five persons for partial pay or none at all, and have averaged that number of charity patients through the past year. The Institution is not fully out of debt, but nearly so, and we are putting up this building so as to be able to greatly enlarge our charity work and to enable us to treat a much larger number with the same expenditure. Our surgical work has greatly outgrown our present quarters, and the new building, which will be chiefly devoted to patients of this class, will be partly devoted to paying patients of the surgical class.

: : A Blessing to the Poor. : :

The plan is to admit into the new hospital only people who have really serious diseases which cannot be satisfactorily treated at home. Applicants for beds will have to be introduced by reliable persons and guaranteed to be indigent and worthy objects of charity; no others will be received. The medical service will be gratuitous. As fast as patients become convalescent, yet not in condition to leave, they will be set to doing what they can to care for themselves, then to aid in caring for others. It will be largely for the benefit of surgical patients, and they will be given all the medical attention and sanitarium advantages that the most wealthy patient can get here. Persons who can pay something for board, even a dollar a week, will be expected to do so.

"The original capital stock of the Sanitarium was less than forty thousand dollars, yet we have expended in gratuitous treatment more than double that sum, most of it within the last ten years."

"What will be the cost of the free hospital?"

"From thirty to forty thousand dollars."

"How is this money to be raised?"

“Some of us have put our hands into our pockets and made a liberal donation to start the enterprise, and provision has been made for the payment of the rest when the building is completed. The Sanitarium corporation will bear the expense of caring for the patients.”

“And what is the present investment in the entire equipment of the Institution?”

“Something more than three hundred and fifty thousand dollars.”

“How many people all told have been treated here?”

“Upward of twenty thousand.”

“And what has been the death-rate?”

“It has averaged below three per year. Of the last 600 important surgical cases, only six have died. This is attributable not merely to good surgery, but to the aseptic conditions secured, and to the superior sanitary conditions with which our hospital wards and the skill of our nurses surround the patient after the operation. A stupid, untrained nurse, a bad diet, and an ill-ventilated surgical ward, will make havoc with the cases of the most skillful surgeon.’

: : Rejected Cases. : :

"You reject some applicants for treatment?" I inquired.

"Yes, we always reject incurables and those afflicted with contagious diseases, and patients likely to be dangerous or offensive to others."

"Do you admit consumptives?"

"Yes, if there is hope for them; if not, we tell them so and let them go. But consumption is not, as commonly supposed, contagious through the breath or the touch, only through the sputa.

: : The Sanitarium Farm. : :

"The Sanitarium does its own farming?"

"Some of it," replied the Doctor. "A mile north-east, in sight from our upper stories, is located our farm of 160 acres, where we have a dairy of thirty fine cows, and rear between three thousand and four thousand chickens each year, with ducks and turkeys in proportion. We grow from one thousand to twelve hundred bushels of strawberries, raspberries, etc., every year."

“Do thirty cows cream the Sanitarium?”

“No; we use five or six barrels of milk every day, but the additional supply is obtained from dairies kept by farmers for our benefit, and which are under our supervision.”

“And do the chickens partake of a more sanitary diet than the average barn-yard fowl?”

“Yes, sir; barn-yard is a foreign country to them. We feed them the same kind and quality of food we give our patients. That is, the bushels of broken food—bread, meat, potatoes, and what not—go straight to the dining-room of the fowls.”

“And that's why I missed that old acquaintance, the travelling man's tavern hash, at your breakfast table, doubtless?”

“Certainly; you never will find ‘hash’ on our bill of fare.

: : The Medical Staff. : :

“How many physicians are on the medical staff of the Sanitarium?”

“We are eight, three ladies and five gentlemen. My associates are all educated in the best regular schools of medicine. They are, Drs. Kate Lindsay, Anna H.

Stewart, O. G. Place, W. H. Riley, H. M. Dunlap, George A. Hare, and Jessie D. Hare.

"Myself and my associates believe in and practice rational medicine, which recognizes no universal principle of cure, but makes use of every remedy which science brings to light and experience proves to be of service in the relief of human suffering or the cure of disease. Our aim has been to make this Institution represent in the most complete form the most advanced type of rational medicine. This Institution is by no means a Water Cure. We do not discard medicinal remedies, but use any remedy of known scientific value. But of course most of our health-seekers need, not medication in large doses, but the diet, treatment, exercise, etc., indispensable to weak stomachs, livers, nerves, and bad habits. They need to be told when it's bedtime, to come in when it rains, that it is as wicked and disgraceful to hang one's self by corset strings as by a halter, etc."

"What is your Training School I hear mentioned?"

"Well," said Dr. Kellogg, "from the beginning we felt the need of nurses who were intelligent and educated in completing the work of the physician, by carrying out instructions and doing many things which he cannot do; and finding it impossible to get nurses trained to our liking, we some years ago opened our

: : Training School for Nurses. : .

To-day we couldn't keep house without this school. Its benefits, too, are wide, as one course requires two years of hard study, and is much more comprehensive than that of other training schools. We send our nurses over all the United States, and have students in our school from Switzerland and other foreign countries. In this school all our bath attendants, and those who administer massage and other forms of treatment, are thoroughly trained. There are now sixty young men and women in the Training School, pursuing a two years' course, using text-books in anatomy and physiology, attending lectures and recitations four times a week, and between times having the leading features of the work experimentally illustrated. Every possible method of using water and electricity is taught, the science of *massage*, and suitable exercises for the various kinds and grades of invalids, preparation of food for the sick—everything that will tend to transform misery into comfort, despair into hope, and sickness into health. Why, our students get thrice the instruction they could in the ordinary hospital, a sanitarium being really the only satisfactory place to carry on a school for nurses."

"And what next?"

“Something that shall make our sanitary influence felt in many private homes even more than now. We have recently opened the

: : School of Domestic Economy. —: : —

All of our domestic helpers are trained in this school. The world needs sanitary housekeepers, and is willing to pay for them. This new school in a six-months' course does what is possible to meet that demand.

“During the first month students in this school are given their board and tuition for their work, and paid wages later, as their proficiency warrants. They are taught the quickest, cleanest, and most wholesome methods of caring for a private house from cellar to garret, with the purpose of keeping the family eating, sleeping and working under conditions that will let them do so a long time. That is, we teach them kitchen and dining-room service, parlor and chamber work; not much fancy cake baking, but scientific and healthful cookery of all sorts, plain and fine sewing, plain and fine laundry work, how to select, preserve and prepare healthful and economical dietaries and bills of fare, to detect bad water, bogus milk, other shams in food and poisonous wall paper; how to ventilate—not a scandal, but a

house, as also how to select carpets for best effect and longest wear, etc."

At this point an urgent call from some bedside drew the Doctor away ; but I may say that this new school for both servants and wives will be conducted by Mrs. Dr. Kellogg, who has for several years operated an experimental kitchen, Mrs. Hall, (the matron), and other teachers.

— : : — What They Eat. — : : —

Well, the medical superintendent having given me so good an impression of the Sanitarium, I concluded to sample it a little further by staying at dinner, and below is the bill of fare, printed on tinted card-board, in buff-colored ink, and at the Sanitarium's own printing-office :—

SOUP.

Tomato Soup.

Green Corn Soup

MEATS.

Beefsteak.

Roast Chicken.

VEGETABLES.

Mashed Potatoes.

Stewed Cabbage.

Green Corn.

BREADS.

Patent Flour Bread.

Bran Bread.

Graham Bread.

Plain Oatmeal Crackers.

Graham Crackers.

Patent Flour Crackers.

Oatmeal Biscuit.

Dyspeptic Wafers.

Granola.

Wheatena.

Cream Toast.

Zwieback.

SAUCES.

Pears.

Stewed Prunes.

Strawberries.

BEVERAGES.

Sanitarium Coffee.

Milk.

Cracked Wheat, with Fruit.

GRAINS.

Graham Grits.

DESSERT.

Apple Tart.

Apples.

I worked over it for an hour, and arose bemoaning nothing but the incapacity of the human stomach, and scores of others seemed to be of my mind. At breakfast, without a *menu*, I was offered the like full assortment of breads, besides warm gems and rolls, the same beverages, oatmeal, and that queen of the mush family—graham grits, a tumbler of cream all to myself, unlimited sweet apples baked without a worm, green apples, eggs of good character, tenderloin steak, baked potatoes, *et cetera*. Then a friend who was trying to gain a pound a day loaned me the dinner bills for a week back, and I note some of the variations: In soups, bean, macaroni, green corn, beef, rice and vermicelli, in meats, roast beef, mutton, fish and stewed chicken; in vegetables, sweet potatoes, peas, squash, baked beans, lima beans and sweet corn; in sauces, apples, peaches, cranberries, blackberries, apricots and blueberries; in grains, hominy, rice, pearl barley and gluten; and in dessert, lemon, breadfruit and chocolate puddings, besides raisins, nuts, bananas and oranges.

“Well, well,” I said, “the believers in the starvation cure have to go elsewhere to find their remedy.” The orthodox tea and coffee, too, are served when called for in cases in which they are not forbidden by the doctors. But the most approved drink here is hot water, which is served through the halls to all who present their little pitchers an hour before each meal, and again about six P. M., and the advice

is to moisten yourself with four or five glasses a day, then omit all drink at meals. By the way, it's a two-meals-a-day institution—breakfast at 7:30, dinner at 1:30—though if the old habit won't give way, one may have an evening lunch sent to his room; but it is now bedtime, and dinner promises to put off appetite till breakfast bells.

: : : Where They Eat. : : :

When appetite has been smothered with a "square meal," the man at the table looks up. I found myself dining in a hall of very tasteful and elaborate finish; table room for 300 or more; three sides full of broad windows, the floor waxed; two breadths of velvet carpet down the long center aisle; the fresco and the woodwork pleasing to the eye; a banana tree and two or three palms in a wide alcove at the far end—a little patch from the tropics—and fine pot plants in full bloom, from the green-house, flanking the entrance; huge mirrors, reminding the eater of his daily gains, and reflecting tables surrounded with easy chairs, and tables laid with the whitest of the loom; handsome glass and china, and cutlery that never dug turnips, while the tables are served by pleasant-faced and obliging young women in neat blue dresses of simple pattern. The quiet serving of the guests by the waiters min-

isters also to appetite—no rush, scold, bang, clatter, or loaded tray, bottom up, on the floor. The dining-room style is in such good breeding that even the crude among the invalids catch the spirit. Inquiry shows that the “waiter girls” are students in the Training School, and no “tips” allowed.

Again, feeling a sort of health-lift satisfaction with inspection thus far “on our own hook,” I kept on “taking in” the building and the grounds. Passing out by the light and roomy business office, I felt a curiosity to know who held office at the top of so unique a resting place for the tired out. Treasurer Murphy satisfied me with this list of directors: J. Fargo, I. D. Van Horn, G. H. Murphy, L. M. Hall, A. R. Henry, W. H. Hall, J. H. Kellogg; and the executive officers: J. H. Kellogg, president, J. Fargo, vice-president, G. H. Murphy, treasurer, W. H. Hall, secretary and steward, Mrs. L. M. Hall, matron, Rev. L. McCoy, Chaplain.

———— : : Steps Outside and Inside. : : ————

Getting out, I found the grounds of the Medical and Surgical Sanitarium to consist of seven acres, with a turtle-back slope, and a creek across the barn corner at the rear. Round about is a village of two-story sanitary cottages, fountains, green-

houses, summer-houses, trees, flower beds, lawns, a deer park, with a fine deer from the Indian Territory, containing also a tame bear, monkeys, squirrels, and marmosets, paved walks, electric light, and no fences. And huge on the crest at the front stands the main building. It is of brick and five stories above the basement, has a total frontage of 416 feet, and the width is 54 feet, with architectural variations and looming skyward 84 feet from corner stone to promenade.

Now this little structure affords not coops, but high, roomy rooms for 250 people. The cottages can rock to sleep 150 more, and the rising Free Hospital will rest affliction "on flowery beds of ease" for another 200.

Come in out of the cold! It might be four below out there; in here, Florida in February. Steam turned off in half the rooms, and ventilating shafts always open, yet the thermometers in halls and private rooms registering from 66 to 72, and the air so pure I thought nothing about it but to take in all that got in my way. I found the floor space to exceed two acres, yet the first floor only just large enough for parlor and reception rooms, business office, medical offices, spacious hall-ways and waiting rooms, post-office, gentlemen's treatment rooms, dining hall and gymnasium, laboratory, rooms for mending throats and lungs, the electrical rooms, where lightning strikes to order, eye and ear department, and the *et cetera* of closet and pas-

sage way. All other floors are chiefly private rooms, opening off halls three paces wide and reached by two broad flights of stairs and an elevator that lifts a dozen on foot and a pair of invalids in wheel chairs.

There's a veranda almost around the lower three stories, 200 feet of the second one cased in with glass as a sun parlor and tramp ground in winter, and little balconies higher up. In fact, there's half a mile of promenade through halls and verandas, a second and third sun parlor aloft on the south, and up in the hall of the fifth, I stepped out on to the roof. There are two water closets on each floor, hot and cold water, hose pipes, Babcock extinguishers, and outside fire escapes. But it would take an expert to fire the building, since a watchman walks the halls once an hour all night, and neither match, gas, lamp, nor stove, except the cooking ranges in the tiled kitchen and the fires in the remote brick engine room are permitted, every spot being heated with steam and lighted with the Edison electric lighting system. Many of the rooms have grates, but guests seldom use them, being satisfied with the perfect ventilation which supplies a soft, steam-heated air in great abundance.

Among the extras on the second floor are the ladies' bath and treatment rooms, and a large conservatory, growing figs, bananas, rubber, the cactus, and other tropical odds.

The third floor parlor is a sort of "rogue's gallery," in which many patients have left behind the photographs taken in the "before-and-after-taking" style. For instance, there hang the two faces of a man who came a dyspeptic skeleton of 97 pounds and went away with 176 muscular pounds. Close by are two photographs bearing the same name, but which bear no resemblance to each other. One is a down-in-the-mouth, lean and despairing face; the other, plump, rosy cheeks and lips, sparkling eyes, a face "pretty as a picture" and happy as a cherub.

— : : — Guest's Apartments. : : —

A walk through the halls and a score of rooms shows that the Sanitarium is furnished for health and comfort, not for questionable luxury; for patients who can pay an average of \$2.00 a day for board and room and constant medical attendance. For instance, in the parlor are a score of large arm-rockers, cane seated, the seating of most of the chairs, and every room contains two rockers. Last night I slept in an average fourth-floor room, on a spring bed that made me at home till 6 o'clock, between clean sheets. The wood-work of the room is the varnished pine, and there are a wardrobe of the same, a tasteful bedstead, dresser, commode, and table, two

rockers, and a chair on legs. The central half of the floor is covered with a brussels carpet, in one piece, the border the health device of hard pine, varnished and laid around the room with walnut checks at the corners. Then there are a steam coil, a mantel and Edison burner; and the bill is at the transient-guest rate of \$1.00 a day for room and food. Daily medical inspection and treatment would simply double the terms, making \$14.00 a week. Still, on the second floor, I looked into some elegantly marbled and decorated suites you may pay \$25.00 a week for, if you like, and swell the charity fund.

—: :— how the Building Breathes. —: :—

I dropped into a small basement room, and was struck by a blizzard of Dakota power. It came through a five-foot hole in the outer stone wall, in which a huge fan was whirling. On the outside was a brick tunnel one might walk through. It ended 70 feet away under a rustic summer house, whose center was a vertical cold-air shaft about seven feet square and fifteen feet high, in which, I was told, the summer air was cooled by evaporation from 1200 feet of muslin kept constantly wet.

In the small basement room mentioned, the first thing that torrent of cold air struck, besides the investigator, was 1200 square feet of steam heating coils overhead. In the room below was Minnesota in a blizzard. Opening a door into a little room whose sides gaped with the mouths of channels to different parts—the receiving room of the air as it left the coiled pipes—I had a breath of Florida, and the fresh air swept swiftly up the flues to enter even the remotest room as pure as outdoors and right against the steam-coil of that room, to be warmed over, if not warm enough. I tested the current at the inlet into my room, and it blew scraps of paper along the floor, while through the ventilating outlet in the opposite baseboard scraps went skyward. Toward the farther end of the basement I found another little room and the fan and stream of cold air against 1200 square feet of hot pipe repeated, the two streams pouring in pure air at the rate of twenty-five barrels per minute for each patient.

All kitchen steams shoot up a funnel-duct over the cooking ranges in the basement; the outward drafts of the dining-hall were near the floor; those of the serving room or assistant kitchen at the side were near the ceiling, so that the current through the doors was always from the guests, and no smell of kitchen is ever discernible in dining-room or any other portion of the house. Even the general first-

floor water closet, with a current along the under side of every seat, a flue above and below each urinal and a layer of charcoal under it, changed every night, had no trace of bad breath.

So I voted the fresh-air system of the Sanitarium perfection; and its stale-air elimination I voted ditto.

: : — Fire, Light, and Drainage. — : :

I looked with great respect upon the row of furnaces eating ten tons of coal yesterday, and the row of boilers with such devices as gave a moist Southern atmosphere at will to one room, and to another a cool, dry Northern air; and then the Edison dynamos and apparatus in a side room supplying the sanitary colony with 500 incandescent burners at a cost but little exceeding the oil that lubricates the machinery—\$400 a year and four times the light, instead of \$2500 for gas. This impressed me as an improvement.

I applied the nasal test to the kitchen sinks and other outlets for refuse, and got no tainted whiff; all outpourings ran away to the river, and flues from the sew.

ers to the great smoke-stack sucked all gases and odors up chimney; the system was cleanliness and life insurance.

Neither did the kitchen, with its adjacent helpers' dining-room, make a man loathe his victuals; the milk-room, with its large coolers full of the fluid in cans packed in ice, didn't curdle the glass of cream that had entered into my breakfast. The bakery, with two men loading and unloading the revolving oven, told that the dozen varieties of bread food on the table were the work of "our special artist on the spot." In the packing room, girls were putting up supplies of these foods for shipment. The supply store wore the air of the grocery that works to please and lives by it, while the Sanitarium printing-office was a "daisy" in the eye of a newspaper man, with its eight or ten hands turning out the sanitary blanks, department reports, letter heads, daily programmes, the shipping labels, the colored wrappers for "health foods," etc.

: : The Rooms for Surgical Work. : :

On the retired portion of the third floor I got into the serious field of knife, needle, bandage, and the nursing of the maimed and disabled up into a desirable

life. Its operating room and the sixteen wards for surgical patients are removed from the main hall by three doors and two passage-ways, and the cleanliness of all kinds seemed to have conscience in it. The floor and side walls waist high were covered with heavy manilla paper in long, wide strips, glued down, painted three coats and varnished—not a cranny for germ or vermin, while ventilation, with a smoke-stack draft, kept the air as fresh as a breath from the prairie, yet warm—12,000 feet of it per hour for every patient. Being only a layman, I might mistake on technical points, but my nose is a professional; yet it and I stepped in where lay a man whose back the day before had been cut open, one kidney lanced, two quarts of pus extracted, more constantly oozing onto cotton, and the urine all passed that way, and still there was no trace of taint in the atmosphere.

The hospital kitchen was neat as any mother can keep hers; intelligent nurses in white caps glided in and out. Beside each bed hung a tablet of ward blanks headed "Daily Report of Nurse." This records the patient's sleep in time and character, respiration, pulse, temperature, food, medicine, pain, state of mind, of nerves, of wound, and whatever else can help the physician to see the case as well as though constantly in the room.

In the operating room stood a broad caseful of very impressive-looking implements resting on velvet, a high, narrow table with leather cushion and large leather castors that wheel the patient tenderly to the bedside, and no carpet or needless furniture. A tablet of blanks for cases lay on a side table ready for use, giving date of operation; the name, age, address and nationality of the patient; names of surgeon and assistants or others present; history, diagnosis, and preparatory treatment of the trouble; the anæsthetic used, moment of its application, and time and description of the operation, etc.

So, when to the air, and the trained nursing, and the exact diet, I added skill in operating, I did not wonder that surgical operations here were a success, whenever success is possible. And then when I learned that some of the most difficult and long nursed had been administered unto the poor without pay, I said, with the colored pastor in Richmond: "The sun do move"—humanity grows warm with kindness. Close by were rooms for persons with lung ailments, in which the air was medicated by various ingenious means, giving to one patient an antiseptic air, fragrant with odors that germs cannot live in, while in another the patient inhaled the perfume of a pine forest, and found the balsamic ozonized atmosphere a healing balm to his asthmatic lungs.

: :— A New Patient. : :

I followed a new-comer, saw him as Adam in Eden, saw him tested by highest medical knowledge and contrivances for weak spots, from his corns to his bald head, then inquired of for all that he hated in himself and his grandfather; and saw the points put to paper. I tagged him into the labyrinth of rooms where ten trained and muscular young men in tropical scarcity of clothing were putting twenty men and boys someway "out of joint" through every known healing form of bath, from Turkey to Battle Creek; and in adjoining rooms clean men were laid out in the hands of the massage artists, being lubricated and kneaded and limbered from top to toe.

And there were rooms and appliances for ten more, the full thirty being worked at, wet and dry, a full hour each; that is, the force could treat more than a hundred men in a day, while the ladies' treatment rooms were one-third larger, with twenty-five strong, rosy-cheeked attendants—the two sets able to renovate several hundred in a day.

Then what? Well, my friend got out with a new glow on his face and a new spring in his shoe. In the chemical laboratory, the doings of his kidneys were qual-

itatively and quantitatively analyzed, as the truest test of what his whole system was doing. And in the office of the medical clerk I saw where that analysis was recorded in a great book, even to quantity, color, odor, reaction, specific gravity, and amount of urea, as also everything hostile to nature there. And in another big book I saw the register of his weight, height, strength, lung measurements, respirations, the pulse, action of the heart, and a lot more. So I thought the doctors had found what was in him and what ought to be. On a long diet list the doctors marked

— : : What he Better Eat, — : : —

on another paper they marked how much he better play with things in the gymnasium, and on still another they told how much he better let the Swedish movements play upon him. It looked as though doctors were human; they believed in exercise by other people.

I got a look through the row of private offices, with their cases of unthinkable inventions for cheating nature of a needless hair on a lady's face, removing the abnormal growths with electric needles and the like; but the personal confidences of those rooms are of course locked in the breast of the physician, and the key thrown

in the well. Had I friends there, I should thank my stars the doctors are men and women of conscience. But through an evening hour in the semi-private place of minor facial treatments, I saw eyelids turned wrong side out and something done for 'em, the ears of the deaf unstopped, the nasal polypus ensnared, the crook taken out of a nose, the abnormal tonsils plucked from bub's throat before he had time to shut his teeth, and the red-hot electric needle touched to the angry spots at the back of a throat—thirty made happy in an hour.

And while I looked on, in came a page with the half-daily report bearing the temperatures of a score of patients in the surgical ward, four of whom the surgeon had seriously dealt with that afternoon. It stood below 100° F. in all, and the doctor smiled as he tweaked the next nose.

: : Across the Hall. : :

Here I fell in with two full laboratories, chemical and biological, a suite of rooms and side rooms ample for the skillful treatment of throats and lungs whose owners had ill-treated them. The physician in charge of the many odd contrivances offered to put me into the pneumatic cabinet, pump out the air, and make the air rush into

my lungs, or to work my breathing bellows for me for a quarter of an hour, to let me inhale or exhale into compressed air; to inhale or exhale into rarefied air; to inhale oxonized air or pure oxygen, or give me the air bath, air douche, or even an oxygen enemata—a short cut to the liver. Undoubtedly I looked dazed and reckoned real science could beat the doctor with a duck of a name.

In adjacent rooms—the electrical department—I struck lightning in all sorts and sizes of currents for nerves not on their good behavior, and another physician to handle the jumping factor in vitality. I had an electrical wind blow on me, and saw the doctor sparking a lady patient after the most approved scientific method. A minister, a small boy, and an old maid, sitting on stools on a glass-legged platform, were so astonished that their hair stood on end.

: : Medical Machinery. : :

I stumbled into a noisy room about fifty feet on the square. It proved to be the hall of Swedish movements. There, run by a steam shaft coming in somewhere, were twenty-five or thirty strong machines, jiggling and sliding and rolling, that exercised a man while he did nothing but sit, lie or stand still. He took hold of one,

and it shook his hands as though he had a double dose of palsy. He sat in an arm chair, and vibrated through every muscle. He lay flat and face downward upon a cushioned plank, and while it slid slowly back and forth six or eight inches, through a central opening gently worked a half-dozen leather fists kneading the stomach and bowels, thus knocking dyspepsia out of time. Another two-fisted thing paddled sleepy kidneys that way; others shook and rubbed legs and feet; others gave electric-like vibrations to sides and back. Some more slapped him well with wide straps, and all along the line, recalling the memory of his mother's slipper. A new set, with a bunch of padded fingers, thumped him wherever circulation was slow, and a swift-whirling, corrugated wooden drum put frictional electricity into his feet till each particular hair stood on end. No man got out with a poor pulse. The spot seemed the Paradise of weakness and laziness. On inquiry I learned that this room contained the best Swedish movement machinery made in this country or Europe, and that fully half of the apparatus had been devised by the Superintendent especially for this Institution.

In another room a muscular Scotchman put the victim through five hundred hand-movements that made him also exert his own muscle. Here paralytics had their dead limbs resurrected, and rheumatics their stiff joints limbered up by skillful manipulations.

: : Working Their Passage. : :

I looked into the Gymnasium, a choice hall, some 50x85 feet on the floor, ceiling high, windows on three sides and ventilators thick. And these are some of the helps to muscle I noted around the sides: Rowing machines, chest weights, chest expanders, the quarter circle, eccentric, machines for strengthening the back, neck, shoulder, wrist and fingers, horizontal, vertical and traveling bars, swinging rings, inclined plane, leg machines, etc., with long rows of dumb-bells and Indian clubs, which are manipulated by classes, to piano music, at stated hours of the day, with one of the physicians on the rostrum as leader. Patients are told here that idleness is the bane of health, and that if they want to get well quick and to stay, they must work their passage with the dumb-bells and Indian clubs, and other playthings in the gymnasium. And the man of a month in the harness seemed to swing fifteen pounds easier than the fresh hand did six, which seemed proof that the theory was good in practice.

: : - Social Life and Goguac Lake. : :

The social life of the Institution is a contribution to right living and healthful good nature ; daily morning worship in the parlors, but attendance voluntary ; a short sermon Sunday afternoon ; a literary society conducted by the patients every Saturday evening ; a library of good reading and plenty of sociability amid the exercises in the gymnasium, at meal times and while waiting for turn at the medical offices. There may be individual "blues," but the general life among the patients is cheerful and anti-blue.

Outdoor walks are encouraged ; also summer picnics to Goguac Lake, a two-and-a-half mile basin of clear water, a mile and a half to the south, whence, by stand-pipe system this city gets its water. And, by the way, the Sanitarium holds a long-time lease of the most romantic east bank and high bluff of the lake where it will this season erect a summer boarding-house and pavilion, and probably launch a steamer of its own. There are already several fine steamers upon the lake, some of which make regular trips down the lake and back during the summer months, while others may be chartered for special excursions at very reasonable rates. This is a most delightful spot in June, July, and August, and is much frequented for camping, fishing,

swimming, etc., if not flirting. A number of wharves and boat-houses supply sail-boats and a variety of row-boats in abundance. Its shores sport a pleasant settlement, with summer hotels, parks, drives, and all other attractions that gather the dwellers for pleasure from near and away off in heated times.

— : : — The Children's Chance. — : : —

If I were coming here to get rid of poor health, I'd bring the little folks along, to give them a good start in good health, mental as well as physical. Under the conduct of kind and experienced teachers, and in a pleasant place, there is a kindergarten, which I visited, and saw more than forty little folks from three to eight years old, in their sports, marching to music, tinkering at tea-kettles in clay, weaving mats, busily enjoying many industrial amusements, and easily learning much from the many object lessons they thought fun.

In another cottage is the nursery, where patients' children are tenderly cared for twenty-four hours a day, if desired, to the relief of invalid mothers who want Dotty Dimple to be near them, but cannot endure the care of her much of the time. And in both nursery and kindergarten the expense was a trifle.

It struck me that the lambs of the Sanitarium flock were cropping a pasture that would incline them unto virtue and vitality all along the way up to three-score and ten. Let Jimmy and Jennie have a taste in that pasture, and keep mother contented under treatment.

And while I wondered what more could be done for the beginners of now-a-days, I learned that a Sanitarium

: : -- Orphan's home -- : :

had already a group of five, and that it was expected to increase the number to twenty-five the coming summer, and later to fifty. Unprotected orphan children from three to five years old are taken, fed, clothed, and educated in the kindergarten, in school, and the knowledge of hygiene. This enterprise is one for which Dr. Kellogg is individually responsible. It is a hobby of his that if children are properly fed, clothed, and educated from infancy, they won't take so naturally to deviltry as a great share of the young folks do now-a-days. So it is his purpose to rear half a hundred little folks to young manhood and womanhood, giving them the best possible conditions for physical, mental and moral development. Especial attention is

given to physical culture. The little dots are daily put through a system of exercises with Indian clubs and dumb-bells, marching, and what the soldiers call "setting up drill," to make them grow up with broad chests, strong muscles and supple joints. Each will be taught some trade, and when old enough, required to be so far as possible self-sustaining. The enterprise impressed me as being as excellent as it is noble.

Well, I thought, it would n't take many such schemes to make room for a pretty liberal income. I suppose it is as well to invest something in growing sound youngsters as in patching broken oldsters.

I was puzzled to know how any very considerable amount could be saved for charitable work, when an army of employes, almost equaling the patients in number, are constantly under pay, and at great expense for board and lodging, and when the best of hotel accommodations and excellent board are furnished at so moderate a price as \$1.00 a day. I soon found the secret, however, in the fact that all engaged in the Institution, from the superintendent down, are interested in its humane purposes; and while the ordinary helpers receive perhaps as much as they could earn elsewhere, managers and physicians, whose services are invaluable to the Institution, cheerfully labor for the most moderate compensation. No one connected

with the Institution, or indeed any other person, has ever received the smallest portion of its earnings. Every dollar is jealously guarded by the managers, to be used for the benefit of suffering humanity, either in adding to the facilities of the Institution or in the treatment of the worthy sick poor.

: : — What the Patients Said. — : :

Having finished my day of tramp and inspection, surely I felt, even to my legs, that the Sanitarium was not "one-horse" in size, and saw well enough that it was not one-idea in theory, but was in both points broad-chested and good looking. Still I thought I'd see what the folks said who'd tried it; so, both in person and through a lady friend, I interviewed a number.

"Sick eight years, in bed three; came on a cot last September; now just a-going home sound and happy; a surgical operation did it," was the story, short and sweet, of one bright-eyed woman I saw swinging the dumb-bells.

A young woman said, "I came three months ago, bed-fast with spinal complaint, a skeleton that could n't stand up. Now see me, 126-pounder, going home next week." And she was a nice picture—not framed in corsets, either.

A sandy-haired young man smiled as he answered: "You bet I like it. I came here a few weeks ago, scrawny, and stomach so sore with indigestion that every step was painful. I'm not well now, but digesting fair rations, gaining a pound a week, taking light exercise, and full of hope. There seems to be a lot of common sense here, and if I get rid in one year of what it took ten years to load myself with, I think I'll be mighty satisfied."

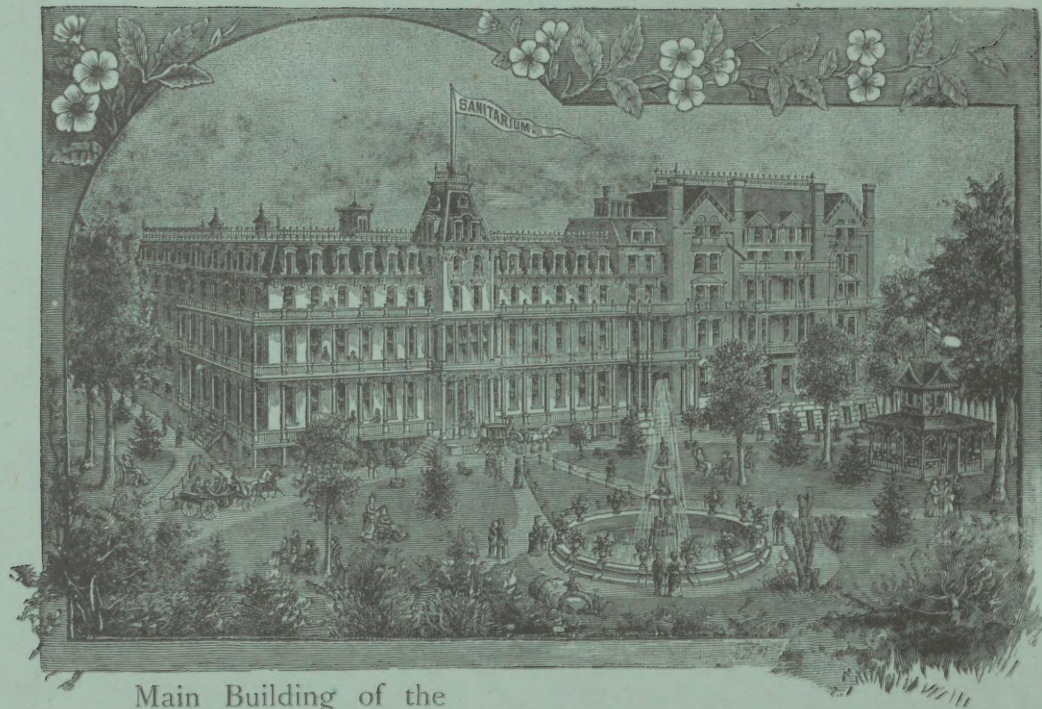
A youth of twelve years was in charge of an aunt, who said of him: "When we came here a few weeks ago, Sumner was so full of catarrh he could not breathe through his nose at all; emaciated in all his limbs, could not sustain his weight with both hands. Some of his doctors said he could not live a year. Now, you see, he breathes easily, is in good flesh and heart, and goes ten consecutive times through the row of swinging rings, the whole length of the gymnasium. Five abnormal growths have been removed from his nose and throat, and his outlook for life is good."

Well, these cases reflect the general tone of remarks among patients, the most hearty approval coming from those who have been here longest, the grumblers seeming to be those who, having labored half a lifetime to acquire a first-class chronic disease, don't see any virtue in treatment that won't bankrupt the mischief in a week.

: : Grits and Morals. : :

Just looking into the shipping office of Secretary Hall, I learned that he was shipping from twenty to fifty lots of food daily—grains, crackers, granola, et al.; then I noticed the doctors on their evening round among patients, and will end my healthy gossip by quoting the Institution's circular on the local morality: "Sectarianism is not encouraged. All persons employed in the Institution are believed to be Christian ladies and gentlemen, and it is the effort of the managers to maintain in the Institution a spirit of genuine, elevated, unobtrusive Christianity, believing that genuine religion is one of the most helpful of all means by which the suffering, despairing, will-weakened invalid may be brought into right relations with the laws of God which govern his physical well-being. Persons who do not hold to any religious faith are made welcome as others, but are requested not to disturb others by irreligious talk or conduct."

James Clement Ambrose.



Main Building of the
Medical & Surgical Sanitarium,
Battle Creek, Michigan.